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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,466	01/06/2004	Jae-Ryong Park	1594.1321	2366

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WASHINGTON, DC 20005

EXAMINER
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PATEL, RITA RAMESH

ART UNIT	PAPER NUMBER
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1746

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/07/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/751,466

Applicant(s)

PARK ET AL.

Examiner

Rita R. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 23-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date 1/6/04.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election with traverse of claims 1-22 in the reply filed on 2/6/07 is acknowledged. The traversal is on the ground(s) that applicant argues claims 23-27 are so closely related to elected claims 1-22 that they should remain in the same application, and it is believed by the applicant that the evaluation of both sets of claims would not provide an undue burden upon the Examiner. This is not found persuasive because in re applicant's arguments that the two groups are closely related and thus not restrictable, the Office notes that for the purpose of restriction "independent" and "distinct" must be considered together. Clearly for reasons already recorded, the process and apparatus are distinct; process and apparatus for its practice can be shown to be distinct inventions, if either or both of the following can be shown: (A) that the process as claimed can be practiced by another materially different apparatus or by hand; or (B) that the apparatus as claimed can be used to practice another materially different process (MPEP 806.05(e)).

Applicant fails to adequately rebut prima facie case for restriction. See the following excerpt from the MPEP 802.01:

"A large number of inventions between which, prior to the 1952 Act, division had been proper, are dependent inventions, such as, for example, combination and a subcombination thereof; as process and apparatus used in the practice of the process; as composition and the process in which the composition is used; as process and the product made by such process, etc. If section 121 of the 1952 Act were intended to direct the Director never to approve division between dependent inventions, the word "independent" would clearly have been used alone. If the Director

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has authority or discretion to restrict independent inventions only, then restriction would be improper as between dependent inventions, e.g., the examples used for purpose of illustration above. Such was clearly not the intent of Congress. Nothing in the language of the statute and nothing in the hearings of the committees indicate any intent to change the substantive law on this subject. On the contrary, joinder of the term "distinct" with the term "independent", indicates lack of such intent. The law has long been established that dependent inventions (frequently termed related inventions) such as used for illustration above may be properly divided if they are, in fact, "distinct" inventions, even though dependent."

Therefore, the Office maintains its original restriction requirement and thus claims 23-27 are withdrawn from further consideration.

The requirement is still deemed proper and is therefore made FINAL.

#### ***Priority***

Acknowledgement has been made of applicant's claim for priority under 35 U.S.C. 119. This application claims the priority of Korean Application 2003-50656 filed 7/23/03.

#### ***Drawings***

The drawings received 1/6/04 are acceptable for examination purposes.

#### ***Claim Objections***

Claim 21 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper

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dependent form, or rewrite the claim(s) in independent form. Specifically, claim 21 claims dependence on claim 21, however this appears to be an error; for the purposes of examination it will be presumed that claim 21 is actually dependent on claim 20.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 8, and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Hashiba et al. herein referred to as "Hashiba" (Publication No. 2001-149685).

Hashiba teaches a tank 33 (water tub) and drum 42 (rotary drum) that is illustrated in the representative drawing to be inclined within a horizontal drum washing machine. The washing machine includes an exhaust hole 95 and has an internal wall that is immediately below the inclined surface of the wash tank and drum. Hashiba teaches a circulation unit which circulates liquid collected in a dehumidifier 47 then sent to a blower 48, next to heater 49, travels through duct 50 (water circulation pipe), and is then returned to the drum 42. Also, Hashiba discloses a washing heater 73 (heater), as well as, a drain valve 82 (control valve) that is connected to a motor 88 by way of a valve rod 94 which in sum read on applicant's claim for a drain unit.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 6-7, 9-12, and 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashiba as applied to claims above, and further in view of Mueller et al. herein referred to as "Mueller" (US Patent No. 5,507,053).

Hashiba teaches the claimed invention except fails to go into detail on how the recirculated liquid is specifically disseminated back into the wash tub, however, Mueller teaches a washing machine with a spray nozzle 78 connected to its recirculation system for ensuring the clothes are thoroughly wetted. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this Mueller spray nozzle feature to Hashiba's recirculation system because effective and thorough re-wetting of laundry during recirculation is known in the art for achieving optimal use of the washing liquid, saving money on supply resources, and rinsing/washing laundry therein efficiently to get very clean laundry.

The representative illustration provided by Hashiba shows an inner drum 42 within a tank 33 that may arguable by formed such that the back-end of the drum (end closer to the shaft) embodies a smaller diameter than the opening of the drum 42; however, it is a bit unclear by the Hashiba drawings the exact shape of the inner drum 42. Mueller, however, illustrates in Figure 2 an inner rotating basket 36 that embodies a

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larger inlet diameter and decreases in diameter towards the traversal of the back part of the tub closest to the shaft; this reads on applicant's claims for "a sidewall part which is closed and extends between the rear part and the front part wherein an inner diameter of the sidewall part increases along a direction from the rear part to the front part to allow an internal surface of the sidewall part to be inclined". It would have been obvious to one of ordinary skill in the art at the time of the invention to use an inner tub with a decreasing diameter size to provide a stronger/more centered centrifugal force during rotation and also for aesthetic purposes-having a larger inlet opening allows the user an easier way to deposit and remove clothes from the machine. Choice in aesthetic designs was held to have been obvious. *St. Regis Paper Co. v. Beemis Co. Inc.* 193 USPQ 8, 11, (1977); *In re Harza* 124 USPQ 378 (CCPA 1960).

Finally, the Hashiba reference teaches the claimed invention except fails to go into detail regarding any potential detergent supply unit, and although it is at once envisaged that the washing machine of Hashiba has a water supplying unit, the Hashiba reference fails to specify in detail the feed lines for such an apparatus. However, the Mueller reference teaches a detergent dispenser 54 in connection with supply inlets 40, 42 having control valves 44, 46 as shown in Figure 8 which attach to the washing machine at the front part of the inlet door to respectively feed detergent and water to the tub. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the detergent dispenser and supply line features of Mueller in Hashiba because it is commonly known in the art to use these features in washing machines; washing machines are known to dispense controlled amounts of desired detergents

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during washing processes, as well as dispense controlled amounts of desired supply liquids during washing. Supply fluids and detergent are known in the art of washing machines to be used to fuel the machine and clean laundry therein properly.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Broker et al. (US Patent No. 6,553,594) teaches a washing machine with a control system for clothes washing which includes a heater system.

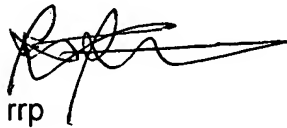
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita R. Patel whose telephone number is (571) 272-8701. The examiner can normally be reached on M-F: 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



rrp



**MICHAEL BARR**  
SUPERVISORY PATENT EXAMINER